

AMENDMENT UNDER 37 CFR § 1.312

1-4. (Cancelled)

5. (Previously presented) A method of controlling, at an intermediate television transmission station, a transmission of television programming to a subscriber station, said intermediate television transmission station having a computer for controlling the storage and communication of said television programming, said method comprising the steps of:

receiving units of said television programming on different channels, by said intermediate television transmission station, from a remote television programming source;

selectively receiving signals transmitted repeatedly from said remote television programming source at specified predetermined time intervals, each of said signals identifying one of said received units or a source of said one of said received units;

inputting said signals to said computer;

prior to receiving units of said television programming, receiving at said computer a programming schedule from a source separate from said remote television programming source, said programming schedule designating for at least one of said received units:

(a) an output channel to be used in communicating said at least one of said received units; and

(b) a time for transmitting said at least one of said received units;

automatically selecting and storing at least one of said received units at a predetermined storage device based on said signals and said programming schedule;

assembling at said intermediate television station, said received units based on said signals; and

automatically transmitting said at least one of said received units from said intermediate television transmission station to said subscriber station at said time and said output channel according to said programming schedule based on said step of storing.

6. (Cancelled)

7. (Previously presented) The method of claim 5, wherein said intermediate television transmission station comprises a plurality of receivers for receiving said received units and said signals, said step of inputting comprising the steps of:

selecting a specific receiver of said receivers; and

inputting said signals received by said selected receiver to said computer.

8. (Previously presented) The method of claim 5, wherein said predetermined storage device includes a local programming source, said local programming source comprising a television programming storage device located at said intermediate television transmission station for storing said at least one stored unit.

9. (Previously presented) The method of claim 5, further comprising the step of logging said step of automatically transmitting.

10. (Currently amended) A method of controlling, at an intermediate television transmission station, a transmission of television programming to a subscriber station, said intermediate television transmission station comprising a computer for controlling the transmission of said television programming, said method comprising the steps of:

receiving at said intermediate television transmission station, first units of said television programming on different channels, to be communicated to said subscriber station, from one or more remote television programming sources;

loading a plurality of second units of said television programming, to be communicated to said subscriber station, onto a local programming source located at said intermediate television transmission station;

receiving at said intermediate television transmission station a plurality of signals from said one or more remote television programming sources, each of said signals designating a unit of said first units and said second units;

identifying in response to each of said signals said unit designated by each of said signals, said unit designated by each of said signals being selected from said first units and said second units;

prior to receiving said first units of said television programming, receiving at said computer a programming schedule from a source separate from said one or more remote television programming sources, said programming schedule designating a time and an output channel for transmitting each of said designated units to said subscriber station;

automatically selecting and storing at least one of said designated units at a predetermined storage device at said intermediate television transmission station based on said signals and said programming schedule; and

automatically transmitting said selected stored at least one of said designated units from said intermediate television transmission station to said subscriber station at the time and output channel designated in said programming schedule.

11-16. (Cancelled)

17. (Previously presented) The method of claim 10, wherein said step of identifying comprises the steps of:

comparing said each of said signals to data in said programming schedule, said data identifying said designated unit;

determining based on said programming schedule whether said unit designated by said each of said signals will be received from said one or more remote sources and should be communicated immediately upon receipt to said subscriber station, or whether said designated unit is loaded onto said local programming source and should be output therefrom to said subscriber station, each of said second units loaded onto said local programming source being stored at a storage location on said local programming source; and

identifying said storage location of said unit designated by said each of said signals if said designated unit is loaded onto said local programming source.

18. (Cancelled)

19. (Currently amended) The method of claim 10 and further comprising the step of logging said step of automatically transmitting.

20. (Currently amended) An apparatus located at an intermediate television transmission station for controlling a transmission of units of television programming to a plurality of subscriber stations, said apparatus comprising:

a first receiver for receiving multiple units of a television programming and a first identifiers on different channels from a remote television source, said identifiers transmitted repeatedly at specified predetermined time intervals, each of said identifiers identifying a unit of said multiple units, said multiple units are selectively assembled at said intermediate television transmission station based on said identifiers ;

a second receiver for receiving a programming schedule from a communication network separate from said remote television source, said programming schedule received at said second receiver prior to receiving said multiple units, said programming schedule designating for at least one of said multiple units:

- (a) a time to transmit to said plurality of subscriber stations; and
- (b) an output channel to be used for transmitting to said plurality of subscriber stations;

a switch having inputs operatively connected to said first receiver and a storage device, said switch having one or more outputs operatively connected to one or more output channels;
and

a computer operatively connected to said first receiver, said switch, and said storage device, said computer having access to said programming schedule and automatically controls of identifying, selecting and storing in said storage device said at least one of said multiple units based on said identifiers and said programming schedule;

said storage device for storing said at least one of said multiple units; and

said computer configuring said switch and automatically controlling said storage device to transmit said at least one unit of said multiple units of television programming from said storage device to said plurality of subscriber stations at said time and on said output channel according to said programming schedule.

21. (Cancelled)

22. (Previously presented) The apparatus of claim 20 wherein said storage device comprises a plurality of television programming storage devices connected to said switch, said computer further configuring said switch to select a specific one of said plurality of television programming storage devices.

23. (Previously presented) The apparatus of claim 20, wherein a first identifier of said identifiers designates said at least one of said multiple units for storage or delayed communication to said plurality of subscriber stations, wherein said computer further operates to control said switch to communicate said at least one of said multiple units to said storage device and controls said storage device to store said at least one of said multiple units.

24-30. (Cancelled)

31. (Previously presented) A method of controlling at an intermediate television transmission station a transmission of television programming to a subscriber station, said intermediate television transmission station having a computer for controlling the transmission of said television programming, said method comprising the steps of:

receiving multiple units of said television programming on multiple communications channels at a said intermediate television transmission station from a remote television programming source;

selectively receiving a signal transmitted repeatedly from said remote television programming source at specified time intervals, said signal identifying at least one of said multiple units of television programming;

receiving a programming schedule from a source separate from said remote television programming source prior to receiving said multiple units of television programming, said programming schedule designating for said at least one of said multiple units of television programming:

(a) an output channel to be used in transmitting said at least one of said multiple units of television programming; and

(b) a time for transmitting to said subscriber station said at least one of said multiple units of television programming;

detecting said signal;
passing said detected signal to said computer;
identifying that said detected signal is a predetermined signal;
automatically selecting and storing said at least one of said multiple units of television programming on a local programming source based on said signal and said programming schedule;
assembling, at said intermediate transmission station, said transmission including said at least one of said multiple units of television programming based on said signal; and
automatically transmitting said at least one of said multiple units of television programming from said intermediate television transmission station to said subscriber station in said transmission in response to said step of identifying and according to said programming schedule.

32. (Previously presented) The method of claim 31, wherein said detected signal is one of a plurality of different signals, said step of identifying comprises the step of identifying an instruct-to-delay signal, and said method further comprises storing said selected unit in response to said step of identifying said instruct-to-delay signal, thereby allowing a delayed transmission of said at least one of said multiple units of television programming.

33. (Previously presented) The method of claim 32 wherein said at least one of said multiple units of television programming is identified by said instruct-to-delay signal.

34. (Previously presented) The method of claim 32 wherein said at least one of said multiple units of television programming is identified by being transmitted with said instruct-to-delay signal from said remote television programming source.

35. (Previously presented) The method of claim 31, wherein said signal is one of a plurality of signals, said step of identifying comprises the step of identifying an instruct-to-communicate signal, said step of automatically transmitting being performed in response to said step of identifying said instruct-to-communicate signal, said step of automatically transmitting comprises the steps of:

selecting said at least one of said multiple units of television programming from one of:

(a) stored units stored on said local programming source; and

(b) a plurality of said multiple units of television programming which are not stored on said local programming source; and

transmitting said at least one of said multiple units of television programming to said subscriber station at a time and on an output channel according to said programming schedule.

36. (Currently amended) The method of claim 31, wherein said detected signal is one of a plurality of different signals, said step of receiving said multiple units is performed by a receiver at said intermediate television transmission station, said step of identifying comprises the step of identifying an instruct-to-determine-input signal, and said step of transmitting comprises the steps of:

selecting a unit from one of:

(a) stored units stored on said local programming source, said local programming source being operatively connected to a first input of a switch; and

(b) a plurality of said multiple units of television programming which are not stored on said local programming source, said receiver being operatively connected to a second input of said switch, said switch operatively connecting one of said first and second inputs to a switch output;

identifying one of said first and second inputs from which to transmit said at least one of said multiple units of television programming to said subscriber station in response to said instruct-to-determine-input signal;

configuring said switch to transfer said at least one of said multiple units of television programming from said identified input to said switch output; and

transmitting said at least one of said multiple units of television programming from said switch output to said subscriber station according to said programming schedule.

37. (Previously presented) The method of claim 31, wherein said detected signal is one of a plurality of different signals, said step of identifying comprises the step of identifying an instruct-to-determine-output signal, and said step of communicating comprises the steps of:

selecting a unit from one of:

- (a) stored units stored on said local programming source; and
 - (b) a plurality of said multiple units of television programming which are not stored on said local programming source;
- identifying an output channel over which to transmit said selected at least one of said multiple units of television programming to said subscriber station in response to said instruct-to-determine-input signal; and
- transmitting said at least one of said multiple units of television programming to said subscriber station over said identified output channel.

38. (Currently amended) The method of claim 31, wherein said signal is one of a plurality of different signals, said intermediate television transmission station comprising a switch operatively connecting first and second switch inputs to a plurality of switch outputs, each of said switch outputs operatively connected to at least one output channel, a local programming source and a receiver for receiving said multiple units of television programming operatively connected to said first and second switch inputs, respectively, said step of identifying comprises the step of identifying an instruct-to-transfer signal, and said step of transmitting comprises the steps of:

identifying one of said first and second switch inputs from which to communicate said at least one of said multiple units of television programming;

identifying one of said plurality of switch outputs to which to transfer said at least one of said multiple units of television programming, said identified one switch output being identified through the designation of said output channel by said programming schedule;

communicating a switch control signal to said switch in response to said steps of identifying said one of said first and second switch inputs and said one of said plurality of switch outputs;

configuring said switch in response to said switch control signal to transfer said at least one of said multiple units of television programming from said identified one of said first and second switch inputs to said identified one switch output; and

transmitting said at least one of said multiple units of television programming according to said programming schedule over a cable television distribution system.

39. (Currently amended) The method of either of claims 32, 35, or 37 wherein said step of transmitting further comprises the steps of:

communicating a switch control signal to a switch; and

configuring said switch in response to said switch control signal to transfer said at least one of said multiple units of television programming from a selected input of said switch to a selected output of said switch.

40. (Previously presented) A method of controlling at an intermediate television transmission station a transmission of units of television programming to a subscriber station, said intermediate television transmission station having a computer for controlling the transmission of said television programming, said method comprising the steps of:

receiving said units of television programming on different channels from at least one remote television programming source at said intermediate television transmission station;

selectively receiving a control signal transmitted repeatedly from said at least one remote television programming source at specified time intervals;

identifying an input channel based on said control signal;

receiving, from a source separate from said at least one remote television programming source and prior to receiving said units of television programming, a programming schedule designating for at least one of said units of television programming:

(a) an output channel to be used; and

b) a time said at least one of said units of television programming is to be transmitted to said subscriber station; automatically selecting and storing said at least one of said units of television programming at a local programming source based on said control signal and said programming schedule;

assembling, at said intermediate television transmission station, a transmission including said at least one of said units of television programming based on said control signal and said programming schedule; and

transmitting said at least one of said units of television programming from said intermediate television transmission station to said subscriber station at said time and over said output channel according to said programming schedule.

41. (Cancelled)

42. (Currently amended) The method of claim 40 wherein said intermediate television transmission station has a plurality of said output channels to be used in transmitting said units of television programming to said subscriber station, said step of transmitting further comprising the steps of:

communicating switch control signals to a switch; and

configuring said switch to communicate said at least one of said units of television programming from said identified input channel.

43. (Cancelled)

44. (Previously presented) The method of claim 40 further comprising the step of logging said step of transmitting.

45-49. (Cancelled)

50. (Previously presented) The method of claim 8, 17, 31, 38 or 42 further comprising the step of logging a unit identification signal identifying at least one of:

- (a) said time; and
- (b) said output channel.

51. (Previously presented) The method of claim 5, 31 or 40, wherein said step of receiving said programming schedule comprises the steps of receiving said programming schedule from a remote information source and storing said programming schedule.

52. (Previously presented) The method of claim 8, 17, or 42, wherein said programming schedule is received from a remote information source.

53. (Previously presented) The method of claim 31, wherein said step of storing comprises the steps of:

loading a plurality of prerecorded ones of said units of television programming onto said local programming source; and

storing a plurality of said received at least one unit on said local programming source.

54. (Cancelled)

55. (Previously presented) The method of claim 31, further comprising receiving a programming transmission via satellite from a television network, said programming transmission comprising said at least one of said multiple units of television programming and one or more digital signals embedded in said programming transmission.

56-67. (Cancelled)

68. (Previously presented) A method of controlling a transmission of units of television programming to a subscriber station from a transmission station comprising the steps of:

receiving, at said transmission station, a first plurality of said units of television programming from a remote programming source over multiple communications channels;

storing a second plurality of said units of television programming on a local programming source at said transmission station;

selectively receiving a plurality of signals transmitted repeatedly from said remote programming source at specified time intervals;

receiving, at a computer at said transmission station, a programming schedule that designates for at least one unit of said units of television programming:

(a) an output channel to be used in transmitting; and

(b) a time for transmitting to said subscriber station; automatically selecting and storing said at least one unit of said units of television programming onto a local programming source based upon said programming schedule and at least one of said plurality of received signals;

generating, at said transmission station, a transmission including said at least one unit of said units of television programming based on said plurality of signals and said programming schedule; and

automatically transmitting said at least one unit of said units of television programming to said subscriber station at said time of and on said channel designated by said programming schedule.

69. (Previously presented) The method of claim 68 further comprising a step of logging the step of automatically transmitting said at least one unit of said units of television programming to said subscriber station.

70. (Previously presented) The method of claim 68 wherein said step of storing comprises the steps of:

loading a plurality of prerecorded ones of said units of television programming onto said local programming source; and

storing said second plurality of said units of television programming on said local programming source.

71. (Previously presented) The method of claim 68 wherein said step of receiving a plurality of signals comprises the step of receiving said plurality of signals from said remote programming source, each of said signals identifying either one unit of said units of television programming or a source of one unit of said units of television programming.

72-80. (Cancelled)

81. (Previously presented) The method of claim 68, wherein said step of receiving said programming schedule comprises the steps of:

receiving said programming schedule from a remote information source;
and storing said received programming schedule.

82. (Cancelled)

83. (Currently amended) An apparatus for controlling a transmission of units of television programming to a subscriber station, said apparatus comprising:

one or more receivers for receiving a first plurality of said units of said television programming, said first plurality of said units are received on multiple communications channels and a plurality of signals from a remote programming source, said plurality of signals being transmitted repeatedly at specified time intervals;

a television programming storage device for storing a second plurality of said television programming units;

a switch having inputs operatively connected to said one or more receivers and said television programming storage device, said switch having one or more outputs operatively connected to one or more output channels;

an input device for inputting prior to said one or more receivers receiving said first plurality of said units of television programming a programming schedule, said programming schedule designating for at least one unit of said units of television programming:

- (a) a time to transmit to said subscriber station; and
- (b) one of said one or more output channels to be used for transmitting to said subscriber station; and

a computer operatively connected to said switch and said television programming storage device, said computer receiving said input programming schedule from said input device, said computer: (a) identifying and selecting said at least one unit of said units of television programming by processing said plurality of signals and said programming schedule from said first plurality of units of television programming and said second plurality of units of television programming, (b) selectively assembling said first plurality of units of television program, and (c) configuring said switch to transmit said selected at least one of said units of television programming to said subscriber station at said time and on said one of said one or more output channels according to said programming schedule.

84-123. (Cancelled)

124. (Previously presented) A method of controlling a transmission of television programming at a television transmission station, said television transmission station having a computer controlling the communication of television programming, said method comprising the steps of:

receiving units of television programming on multiple channels at said television transmission station, each unit of said units of television programming including an embedded control instruction;

selectively storing said units of television programming with said embedded control instructions at a television programming storage device based on said embedded control instructions;

inputting to said computer, prior to receiving said units of television programming, a programming schedule indicating for each of said units of television programming a time and an output channel to be used in transmitting each said unit of television programming to a subscriber station;

automatically outputting each of said units of television programming from said television programming storage device, each of said units of television programming having said control instruction embedded therein based on said programming schedule;

detecting said control instruction in each of said units of television programming outputted from said television programming storage device; and

automatically transmitting each of said units of television programming outputted from said television programming storage device to at least one subscriber station at said time and on said output channel indicated by said programming schedule in response to detecting said control instruction.

125-188. (Cancelled)

189. (Previously presented) A method of communicating signals from an intermediate television transmission station, said intermediate television transmission station comprising a plurality of transmitters and a computer for controlling a communication of information, said method comprising the steps of:

selectively receiving an information transmission from a remote source, said information transmission comprising a plurality of signals;

inputting from a remote information source, prior to receiving said information transmission, information that designates an output channel or frequency at a time for communicating or transmitting said received plurality of signals to a viewer or user, each of said plurality of transmitters transmitting over one or more output channels or frequencies;

storing, at said intermediate television transmission station said information inputted from said remote information source;

automatically comparing at least a portion of said received plurality of signals to said stored inputted information to select at least one of said plurality of signals;

automatically determining an output channel or frequency at a time designated for said at least one of said plurality of signals based on said step of comparing, wherein said stored inputted information includes said time and said output channel designated for said at least one of said plurality of signals;

selecting at least one of said plurality of transmitters at said intermediate television transmission station, said selected transmitter transmitting over said output channel or frequency at said time designated for said selected at least one of said plurality of signals;

transferring said selected at least one of said plurality of signals to said selected transmitter; and

transmitting said selected at least one of said plurality of signals from said intermediate television transmission station to a viewer or user over said designated output channel or frequency at said time using said selected transmitter.

190. (Currently amended) The method of claim 189, wherein said selected at least one of said plurality of signals comprises a unit of electronic or computer data, said unit comprising and an identification portion and an information portion, said step of comparing comprises comparing said identification portion to said stored inputted information.

191. (Previously presented) The method of claim 189, wherein said signal selected at least one of said plurality of signals comprises a unit of television or radio programming and an embedded identification signal, said step of inputting comprises inputting a programming

schedule that designates an output channel or frequency and a time for said unit of television programming, said step of comparing comprises the step of comparing said embedded identification signal of said unit of television programming to said inputted programming schedule.

192. (Previously presented) A method of communicating signals at a television transmission station, said television transmission station having a receiver or input device for receiving or inputting programming, at least one storage device for storing received or inputted programming, a transmitter and a computer for controlling said receiving, storing, processing, and transmitting of programming, said method comprising the steps of:

receiving, either via said receiver or said input device, a unit of programming with other units of said programming on different communications channels; each of said unit and said other units includes an identification signal that identifies said unit or said other units of programming;

receiving and storing at said television transmission station, prior to receiving said unit of programming and said other units of said programming on different communications channels, schedule information that designates for said unit of programming:

- (a) a time to transmit said unit to a receiver station; and
- (b) an output channel or frequency for transmitting said unit to said receiver station;

automatically determining, using said computer a storage location of said unit of programming based on said identification signal and said schedule information;

storing at said storage location said received unit of programming with said identification signal that identifies said unit of programming, said unit of programming including audio;

assembling, at said television transmission station, a transmission including said stored unit of programming based on said identification signal and said schedule programming; and

transmitting, using said transmitter said transmission to said receiver station at said time and on said output channel or frequency according to said schedule information.